



REPUBLIC OF MACEDONIA

MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING

AGREEMENT ON THE CONSERVATION OF POPULATIONS OF EUROPEAN BATS

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**MACEDONIAN NATIONAL REPORT
OF THE IMPLEMENTATION OF THE AGREEMENT ON BATS**

Skopje: July, 2010

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MACEDONIAN NATIONAL REPORT

2007-2010

To remind, actions of the Ministry of Environment and Physical Planning and Macedonian Committee of the conservation of migratory species (MBC) for the activities of the bats conservation are described in our National Reports (see: <http://www.eurobats.org/Party Reports/Macedonia.htm>).

Macedonian Committee of the CMS (MBC) has considered following directions:

- Protect the nature ecosystems and habitats,
- Protection of the buildings in urban and rural complexes,
- Promoting important parts of the bats population on biodiversity conservation,
- Organizing The 10 Bats Night (26 August 2009) in Skopje (Old building of the Museum of City Skopje and City Park- Skopje) and in many different places in Macedonia,
- Created Work Program of activities for organizing The 12 Bats Night (August 2010) in Macedonia.

A. General information

- Party: **Republic of Macedonia**
- Date of report: **June 2010**
- Period covered by Report: **June 2007- June 2010**
- Competent Authority: **Ministry of Environment and Physical Planning**

B. Status of Bats within the Territory of the Party

1. Summary Details of the Species

24 species of bats have been identified in Macedonia.

2. Status and Trends

Status and trends of species conservation are the same in previous years.

3. Habitats and Roost Sites

The majority of data has been collected from the traditionally examined areas, which are also considered as the key sites of bat diversity. Currently bats are known in 67 localities in the Republic of Macedonia. The territory of Macedonia has been unequally studied. Most important habitat sites include forests and mountains, protected areas, parks with old trees, locality of recreation, old buildings, rivers and ponds, surroundings of natural lakes and dams. Important wintering sites are artificial mining sites, underground caves and spaces. Most of the data originate from the Vardar River valley, (Lepenec, Treska, Pcinja, Babuna, Topolka, Bregalnica, Crna Reka, Boshava, Dochnica, Anska Reka) and Canjon Matka George , Badar-Taor, Demir Kapija George. Collectors also sampled mainly at lower altitudes, while the mountains were neglected. For the majority of them, nursery or pregnant females and juvenile specimens were found in caves or other underground spaces.

4. Threats

Human activities in Macedonia have been apparently large in the lowland areas, as constant draining of wetlands, steady reduction of forests, urbanization of large areas, uniformity in the arrangement and landscaping of farmland, continuing and increasing use of chemicals to eliminate unwanted insects. The higher altitude habitats are less exposed to human activities.

5. Data Collection

The source of data is the Institute of Biology- Faculty of Natural Science, P.Box 162, 1000-Skopje and Macedonian Museum of Natural History, Boulevard Ilinden 86 Skopje

Information with data collection is done by BSPSM, MES, PEONI, ORLE (NGO-s).

But official system for data collection, analysis and yearly reporting, or voluntary network is not yet established.

6. Legal measures taken to protect bats, including enforcement actions.

Traditionally bats never have been a subject of capture, keeping or killing.

Legal measures has been taken in protected areas over in country (132 localities with total surface of 260.855 ha), especially rivers, dams, gorges, lakes, forests and caves.

Legislative basis for bats conservation is include on the New Framework Law for Nature protection. In our Biennial Programme (2009/2010) is include preparation of sub-legislation of Law of Nature Protection, Law of Fishing and Aquaculture and Law of Hunting (2009). Situation of the other legislative is similar to the last update report (2008). In next triennium (2011-2013) sub-legislation will be adopted and harmonized with the EU Directives.

7. Sites identified and protected which are important for the conservation of bats

The Macedonian Committee of the Bonn Convention (MBC) was promoted actions to make the Macedonian list of SCI (important to the conservation of bats). This action is coordinated and instructed of experts from sciences institutions of nature conservation: Institute of Biology, Faculty of Natural Sciences Skopje, BSPSM, Macedonian Museum of Natural History Skopje, Speleological Society "Peoni", Skopje, and Department of Biological Diversity and Nature on the Ministry of Environment and Physical Planning.

8. Consideration given to habitats which are important for bats

Project for research and conservation natural habitats (caves) important for bats protection has been carried out. This action coordinate experts from Zoological Department on Faculty of Sciences, Macedonian Museum of Natural History, Department of Biological Diversity, Skopje, Speleological Society "Peoni" Skopje, and Department of BDN on the Ministry of Environment.

9. Activities to promote the awareness of the importance of the conservation of bats

In reporting period by the Macedonian Environmental Info-Center and Department of Public Communication on the Ministry of Environment and Physical Planning has been promoted this awareness of the importance of conservation of bats population and their habitats. Many of data, information and pictures are include on our web-site and on printing material (prospects, brochures, posters, catalogs, calendars etc.).

Department of Biological Diversity and Nature, with co-operation and assistance of the MBC and BSPSM, has been realized process of implementation measures and actions for protection bat population and their habitats in forests and caves.

The Campaigns of the Macedonian Bat Night since 2007 to 2010 traditionally has been started on 22 May (International Day of Biological Diversity). Special part has been organized on 5 June (World Day of Environment). In last week of August has been organizing many manifestations with education of the schools, ecological sections and NGO-s.

Also, Macedonian Committee of CMS and Macedonian Committee of CBD has organize several debates to protect bat populations and their habitats.

This year many of activities from our Programme where implemented in co-operation of our partners in Macedonia, Contracting Parties in Balkan Peninsula, CEE, EU, other European countries and international organizations and supported by UNEP/ EUROBATS Secretariat.

10. Responsible bodies nominate for the provision of advice of bat conservation and management

Institute of Biology, Faculty of Natural Science- Skopje

Gazi Baba bb, P.Box.162, 1000- Skopje Macedonia

Macedonian Museum of Natural History

Boulevard "Ilinden" 86, 1000 Skopje Macedonia

11. Additional action undertaken to safeguard populations of bats

- Created concept of priority for next triennium (monitoring),
- Preparing application of important projects for biodiversity conservation.

12. Recent ongoing programs (including research) relating to the conservation and management of bats

Project for evaluation of biodiversity components and natural heritage in Gorge Canjon Matka and river Treska has include several important areas for protection of bat population in Macedonia (ASCI). Experts have evaluated natural habitats and species. On the List of fauna species has been include bats species from Rhinolophidae: *Rhinolophus blasii*, *Rhinolophus euryale*, *Rhinolophus ferrumequinum*, *Rhinolophus hipposideros*, *Rhinolophus mehelui*, and Vespertilionidae: *Myotis blythii*, *Barbastella barbastellus*, *Miniopterus schreibersi*, *Myotis capaccinii*, *Myotis emarginatus*, *Myotis myotis*.

Tree studies are taken for EIA on potential areas of vine turbine parks.

13. Considerations being given to the potential effects of pesticides on bats, and efforts to replace timber treatment chemicals which are highly toxic to bats

Department of Biological Diversity and Nature and Department of Environment Impact Assessment in the Administration of Environment, in co-operation whit State Inspectorate of Environment and State Inspectorate of Agriculture has organize actions for elimination potential effects of pesticides on population of birds and bats.

Also, Sector of Nature in Administration of Environment, in co-operation with the Sector of Forest and Hunting by the Ministry of Agriculture, Forestry and Water-management has analyzed the efforts to replace timber treatment chemicals which are highly toxic to flora and fauna, including bats and collect review.

14. Co-operating with other Range States

Active cooperation Macedonian Committee for CMS held between the National Committees and Institutions from UK, the Netherlands, Germany, Albania, Bulgaria, Slovenia, Croatia and Serbia.

15. Measures taken to implement Resolutions adopted by MOP.

Resolution 2.2 Database of Monitoring Results

Creation National framework of the official database system for bats based on monitoring data.

Resolution 4.6 Guidelines for the Issue of Permits for the capture and Study of Captured bats

Administration of Environment, Department of Biodiversity and Nature is hereby responsible for the licenses for bat ringing activities keeping in mint the resolution.

Annex I

Status of Bats within the territory of the Republic of Macedonia

1. Summary details of the Species

Twenty-four species of bats are currently known to occur within the territory of Macedonia. On the basis of the available data from the adjacent regions (Bulgaria, Greece and Serbia) and habitat diversity in Macedonia, the presence of four additional species could be expected. The majority of specimens and information are from spring; summer and early autumn, while winter visits to caves were exceptional. Consequently, only five species (*Rhinolophus ferrumequinum*, *Rhinolophus hipposideros*, *Myotis myotis*, *Nyctalus noctula* and *Miniopterus schreibersi*) were found in hibernation. For nine species we have evidence of their reproduction in the region: *Rhinolophus ferrumequinum*, *Rhinolophus euryale*, *Myotis myotis*, *Myotis blythi*, *Myotis*

emarginatus, *Myotis capaccinii*, *Eptesicus serotinus*, *Pipistrellus pipistrellus* and *Miniopterus schreibersii*.

2. List of threatened bat species in Macedonia

Rhinolophus blasii *Rhinolophus euryale* *Rhinolophus mehelyi*
Rhinolophus hipposideros *Rhinolophus ferrumequinum* *Barbastrella barbastrelus*
Miniopterus schreibersii *Myotis capaccinii* *Myotis emarginatus*.

Table 1. Threatened status of Bat species (Mammalia: Microchiroptera) in Macedonia

	NATIONAL AND SCIENTIFIC NAME OF SPECIES	TREAT STATUS (CATEGORY) (2000)	TREAT STATUS (CATEGORY) (2004)
1	2	3	4
Rhinolophidae			
1 .	<i>Rhinolophus blasii</i>	VU	VU
2 .	<i>Rhinolophus euryale</i>	VU A2c	VU
3	<i>Rhinoloph. ferrumequinum</i>	LR:nt	VU
4 .	<i>Rhinolophus hipposideros</i>	VU A2c	VU
5 .	<i>Rhinolophus mehelyi</i>	VU A2c	VU
6 .	<i>Barbastella barbastellus</i>	VU A2c	VU
7 .	<i>Miniopterus schreibersii</i>	LR:nt	VU
8 .	<i>Myotis capaccinii</i>	VU A2c	VU
9 .	<i>Myotis emarginatus</i>	VU A2c	VU

Source: IUCN/SSC CSG (2001), Hutson. M.A. et al./ Global Status and Conservation Action Plan MOEPP (2003), Petkovski S. & V. Sidorovska/ Country Study of Biological Diversity in Macedonia IUCN World Status: VU- vulnerabl; LR:nt- Lower Risk:near threated

Annex II

Table 2. The distributional and estimated found status of the bat species known in Macedonia

	SPECIES	DISTRIBUTION STATUS	ESTIMATED FAUNAL STATUS	HIBERNATION SITES	SUMMER ROOST
1.	Rhinolophus hipposideros	widespread	common	mines	buildings, caves
2.	Rhinolophus ferrumequinum	widespread	common	mines	caves
3.	Rhinolophus euryale	widespread	common		caves
4.	Rhinolophus blasii	restricted	rare		
5.	Rhinolophus mehelyi	restricted	rare		caves, mines
6.	Myotis mystacinus	widespread	rare		
7.	Myotis myotis	widespread	numerous	caves	caves
8.	Myotis daubentonii	restricted	rare		
9.	Myotis blythi	widespread	common		caves, mines
10.	Myotis emarginatus	restricted	common		caves
11.	Myotis capaccinii	widespread	common		caves, mines
12.	Myotis nattereri	restricted	rare		
13.	Nyctalus noctula	widespread	rare		hollow trees
14.	Nyctalus leisleri	restricted	rare		
15.	Eptesicus serotinus	restricted	rare		caves
16.	Vespertilio murinus	restricted	rare		
17.	Pipistrellus pipistrellus	widespread	common		buildings, caves
18.	Pipistrellus nathusii	restricted	rare		
19.	Pipistrellus kuhlii	restricted	rare		
20.	Hypsugo savii	restricted	rare		
21.	Plecotus austriacus	restricted	rare		
22.	Barbastella barbastellus	restricted	rare		
23.	Miniopterus schreibersi	widespread	common	caves	caves
24.	Tadarida teniotis	restricted	rare		

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